Part 7 - Conditional Constructs in Java

I.Objective Type Questions:

1. What is the value of variable x?
   int a = 99, b= 76;
   boolean x = (a > b) ? true : false;
   A) **true**
   B) false
   C) 99
   D) 76

2. What is the value of variable x?
   int a = 99, b= 76;
   int x = (a < b) ? a : b;
   A) true
   B) false
   C) 99
   D) **76**

3. An if-else statement can be represented by which operator in Java?
   A) iff
   B) ?
   C) !
   D) **?:**

4. Which option is the correct rewrite of the following statement?
   if (salary > 10000)
      bonus = salary * 0.1;
   else
      bonus = 0;

   A) **bonus = (salary > 10000) ? salary * 0.1 : 0;**
   B) salary = (salary > 10000) ? salary * 0.1 : 0;
   C) salary = (bonus > 10000) ? salary * 0.1 : 0;
   D) bonus = (bonus > 10000) ? salary * 0.1 : 0;

5. Given the following code snippet:

   int x = 1, y = 1;
   if (n > 0)
   {
       x++;
       --y;
   }

What will be the value of x and y when n = 0?

A) x = 2, y = 0
B) x = 0, y = 2
C) x = 1, y = 0
D) x = 1, y = 1

6. Given the following code snippet:

```
int x = 1, y = 1;
if (n > 0)
{
    x++;
    --y;
}
```

What will be the value of x and y when n = 1?

A) x = 2, y = 0
B) x = 0, y = 2
C) x = 1, y = 0
D) x = 1, y = 1

7. What type of type casting is shown in the following statements?
1)   char c = (char) 120;
2)   int x = 't';

A) Explicit in both 1) and 2)
B) Implicit in both 1) and 2)
C) Explicit in 1) and Implicit in 2)
D) Implicit in 1) and Explicit in 2)

8. Which statement(s) is/are true for the given code snippet?

```
if (x = y);
  x = 0
else
  x++
```

A) The assignment operator is used instead of the equality operator
B) There should be no semicolon after if (x = y);
C) Semicolon is required after x = 0 and x++
D) All of the above are true

9. Given the following code snippet.

   String grade = (marks >= 90) ? "A": (marks > 80) ? "B" : "C";

   What will be the value of grade when marks = 81?

   A) A
   B) B
   C) C
   D) Runtime error

10. Given the following code snippet.

    ```
    int p = 3, q = 2, r = 1;
    switch(n)
    {
       case 1: p++;
       case 2: q++;
       case 3: r++;
    }
    ```

    What will be the value of p, q and r when n = 2?

    A) p = 3, q = 3, r = 2
    B) p = 3, q = 3, r = 3
    C) p = 3, q = 2, r = 2
    D) p = 3, q = 2, r = 1

11. Given the following code snippet.

    ```
    int p = 3, q = 2, r = 1;
    switch(n)
    {
       case 1: p++;
       case 2: q++;
       case 3: r++;
    }
    ```

    What will be the value of p, q and r when n = 0?

    A) p = 3, q = 3, r = 2
    B) p = 3, q = 3, r = 3
    C) p = 3, q = 2, r = 2
    D) p = 3, q = 2, r = 1

12. Which statement will produce the absolute value of variable x?
    A) x = x < 0 ? -x : -x;
    B) x = x < 0 ? x : -x;
    C) x = x > 0 ? -x : x;
    D) x = x < 0 ? -x : x;

13. Which keyword is optional in the switch statement?
    A) switch
    B) case
    C) default
    D) None of the above

14. Which keyword is mandatory in the switch statement?
    A) break
    B) case
    C) default
    D) return

15. if ((a < b) && (a < c)), then which of the following statement is true?
    A) a is the smallest number
    B) b is the smallest number
    C) c is the smallest number
    D) b is the largest number